

SEQUENCE LISTING

<110> MURPHY, GEORGE L.
WHITLEY, J. PENN

<120> METHOD AND SYSTEM FOR DEPLETING rRNA POPULATIONS

<130> AMBI:076US

<140> UNKNOWN

<141> 2001-12-20

<160> 73

<170> PatentIn Ver. 2.1

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<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

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<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
Primer

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<210> 3

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<212> DNA

<213> Artificial Sequence

<220>

2003-12-20

<223> Description of Artificial Sequence: Synthetic
Primer

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<223> Description of Artificial Sequence: Synthetic
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<223> Description of Artificial Sequence: Synthetic
Primer

<400> 5

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<210> 6

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<223> Description of Artificial Sequence: Synthetic
Primer

<400> 6

taaggagtg atccaaccgc agg

23

<210> 7

<211> 23

Patent # 6,666,666

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<400> 12
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23

<210> 19

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<210> 20

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
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<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 21

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Sequence

<210> 22
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<220>

<223> Description of Artificial Sequence: Synthetic
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<210> 23
<211> 1427
<212> DNA
<213> Bacillus subtilis

<220>

<221> modified_base
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<223> N = A, C, G or T/U

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1427

<210> 24

<211> 1544

<212> DNA

<213> *Bacillus anthracis*

<400> 24

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ccgcatgggt cgaaattgaa aggcggcttc ggctgtcact tatggatgga cccgcgtcgc 240
attagctagt tggtagaggt acggctcacc aaggcaacga tgcgtagccg acctgagagg 300
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<210> 25

<211> 1449

<212> DNA

<213> *Enterococcus faecalis*

<400> 25

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ataagagtga aaggcgcttt cgggtgtcgc tgatggatgg acccgcggtg cattagctag 240
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<210> 26

<211> 1548

<212> DNA

<213> *Lactococcus lactis*

<400> 26

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<210> 27

<211> 1524

<212> DNA

<213> *Listeria monocytogenes*

<400> 27

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<210> 28

<211> 1555

<212> DNA

<213> *Staphylococcus aureus*

<400> 28

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<210> 29

<211> 1551

<212> DNA

<213> *Streptococcus mutans*

<400> 29

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<210> 31
 <211> 1335
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 <213> *Streptococcus pyogenes*

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<210> 32
 <211> 1465
 <212> DNA
 <213> *Mycobacterium avium*

<220>
 <221> modified_base
 <222> (298)..(881)
 <223> N = A, C, G or T/U

<400> 32
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 gggtagccgg cctgagaggg tgtccggcca cactgggact gagatacggc ccagactnct 300
 acgggaggga gcagtgggga atattgcaca atgggcgcaa gcctgatgca gcgacgccgc 360

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cgggtgaatac gttcccgggc cttgtacaca ccgcccgta cgtcatgaaa gtcggtaaca 1380
cccgaagcca gtggcctaac ctttttgagg gggagctgtc gaagggtggg tccggcgattg 1440
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<210> 33

<211> 1536

<212> DNA

<213> Mycobacterium tuberculosis

<400> 33

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ggtgatctgc cctgcacttc gggataagcc tgggaaactg ggtctaatac cggataggac 180
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<222> (11)..(12)

<223> N = A, C, G or T/U

<400> 35

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aactgcctga tggaggggga taactactgg aaacggtagc taataaccgca taacgtcgca 180
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gccacactgg aactgagaca cggtcacagac tcctacggga ggcagcagtg gggaaatattg 360
cacaatgggc gcaagcctga tgcagccatg ccgcgtgtgt gaagaaggcc ttcgggttgt 420
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gggtagaatt ccaggtgtag cggtgaaatg cgtagagatc tggaggaata ccgggtggcg 720
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ccgtagggga acctgcggtt ggatcacctc cttt 1534

<210> 36

<211> 1485

<212> DNA

<213> ACTINOBACCILUS ACTIN

<220>

<221> modified_base

<222> (208)..(1476)

<223> N = A, C, G or T/U

<400> 36

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cttggggaatc tgtcttatgg agggggataa cgacgggaaa ctgtcgctaa taccgcgtag 180
agtcgggaga cgaaagtgcg ggactttntg gccgcatgcc atgagatgag cccaagtgtg 240
attaggtagt tgggtgggga aaggcctacc aagccgacga tcgctagctg gtctgagagg 300


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aatattgcgc aatgggggca accctgacgc agccatgccg cgtgaatgaa gaaggccttc 420
gggttgtaaa gttctttcgg tattgaggaa ggttggtgtg ttaatagcat gccaaattga 480
cgtaaatac agaagaagca ccggctaact ccgtgccagc agccgcggta atacgggggg 540
tgcgagcgtt aatcggaata actgggcgta aagggcacgt aggcggacct ttaagtgagg 600
tgtgaaatcc ccgggcttaa cctgggnatt gcatttcata ctgggggtct ggagtacttt 660
ngggagggnt agaattccac gtgtagcggg gaaatgcgta gagatgtgga ggaataccga 720
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gggccttgta cacaccgcc gtcacaccat gggagtgggt tgtaccagaa gtggatagct 1440
gaaccgagag ggtggcggtt accacggtat gattcangac tggggg 1485

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<210> 37

<211> 1487

<212> DNA

<213> Haemophilus influenzae

<220>

<221> modified_base

<222> (1)..(1387)

<223> N = A, C, G or T/U

<400> 37

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aacaggatta gataccctgg tagtccacgc tgtaaacgct gtcgatttgg gggttggggg 840
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cttaaccttt tggagggcgt ttaccacggt atgattcatg actggggg 1487

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<210> 38

<211> 1532

<212> DNA

<213> Bordetella bronchiseptica

<400> 38

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cggaacgtgc ccagtagcgg gggataacta cgcgaaagcg tggctaatac cgcatacgcc 180
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<210> 39

<211> 1485

<212> DNA

<213> Bordetella parapertussis

<400> 39

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<210> 40

<211> 1464

<212> DNA

<213> Bordetella pertussis

<220>

<221> modified_base

<222> (87)..(1391)

<223> N = A, C, G or T/U

<400> 40

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cagccacact gggactgaga caggccccag nctcctacgg gaggcagcag tggggaattt 360
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agtcggaatc gctagtaatc gcgcatcagc atgtcgcggt gaatacgttc ccgggtcttg 1380
tacacaccgc ncgtcacacc atgggagtgg gttttaccag aagtagttag cctaaccgca 1440
agggggggcga ttaccacggt agga 1464

```

<210> 41

<211> 1535

<212> DNA

<213> Burkholderia cepacia

<400> 41

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taaactgaag agtttgatcc tggctcagat tgaacgctgg cggcatgctt aacacatgca 60
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atcggaaatc gtcctgtagt gggggatagc ccggcgaaag ccgattaat accgcatacg 180
atctacggat gaaagcgggg gaccttcggg cctcgcgcta tagggttggc gatggctgat 240
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gaccagccac actgggactg agacacggcc cagactccta cgggaggcag cagtggggaa 360
ttttggacaa tgggcgaaag cctgatccag caatgccgcg tgtgtgaaga aggccttcgg 420
gttgtaaagc actttttgtcc ggaaagaaat ccctggctct aatacagtcg ggggatgacg 480
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caagcggtta tccggaattac tgggcgtaaa gcgtgcgcag gcggtttgct aagaccgatg 600
tgaaatcccc gggctcaacc tgggaactgc attggtgact ggcaggctag agtatggcag 660
aggggggtag aattccacgt gtagcagtga aatgcgtaga gatgtggagg aataccgatg 720
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taaggagact gccggtgaca aaccggagga aggtggggat gacgtcaagt cctcatggcc 1200
cttatgggta gggcttcaca cgtcatacaa tggtcgggaa agagggttgc caaccgcgca 1260

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gggggagcta atcccagaaa acccatcgta gtccggattg cactctgcaa ctcgagtgca 1320
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ttgtacacac cgcccgtcac accatgggag tgggttttac cagaagtggc tagtctaacc 1440
gcaaggagga cggtcaccac ggtaggattc atgactgggg tgaagtcgta acaaggtagc 1500
cgtatcgga ggtgcggctg gatcacctcc tttct 1535

```

<210> 42

<211> 1488

<212> DNA

<213> Burkholderia mallei

<400> 42

```

agattgaacg ctggcggcat gccttacaca tgcaagtcga acggcagcac gggcttcggc 60
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gcccggcgaa agccggatta ataccgcata cgatctgagg atgaaagcgg gggaccttcg 180
ggcctcgcgc tatagggttg gccgatggct gattagctag ttggtggggg aaaggcctac 240
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gcccagactc ctacgggagg cagcagtggt gaattttgga caatgggcgc aagcctgac 360
cagcaatgcc gcgtgtgtga agaaggcctt cgggttgtaa agcacttttg tccggaaaga 420
aatcattctg gctaataccc ggagtggatg acggtaccgg aagaataagc accggctaac 480
tacgtgccag cagccgcggt aatacgtagg gtgcgagcgt taattggaat tactgggcgt 540
aaagcgtgcg caggcgggtt gctaagaccg atgtgaaatc cccgggctca acctgggaac 600
tgcattggtg actggcaggc tagagtatgg cagagggggg tagaattcca cgtgtagcag 660
tgaaatgcgt agagatgtgg aggaataaccg atggcgaagg cagccccctg ggccaatact 720
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gagtgggttt taccagaagt ggctagtcta accgcaagga ggacggtcac caggttagga 1440
ttcatgactg ggggtgaagtc gtaacaagggt agccgtatcg gaaggtgc 1488

```

<210> 43

<211> 1610

<212> DNA

<213> Burkholderia pseudomallei

<400> 43

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tctagatgcg tgctcgagcg gccgccagc gctgcatgga tatctgctga attcggcttg 60
agcagtttga tcctggctca gattgaacgc tggcggcatg ccttacacat gcaagtcgaa 120

```

```

cggcagcacg ggcttcggcc tgggtggcgag tggcgaacgg gtgagttata catcggagca 180
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tgaaagcggg ggaccttcgg gcctcgcgct ataggggttg ccgatggctg attagctagt 300
tgggtggggta aaggcctacc aaggcgacga tcagtagctg gtctgagagg acgaccagcc 360
acactgggac tgagacacgg cccagactcc tacgggaggc agcagtgggg aattttggac 420
aatgggcgca agcctgatcc agcaatgccg cgtgtgtgaa gaaggccttc gggttgtaaa 480
gcacttttgt ccggaagaa atcattcttg ctaatacccg gagtggatga cggtagcgga 540
agaataagca ccggctaact acgtgccagc agccgcggta atacgtaggg tgcgagcgtt 600
aatcgggatt actgggcgta aagcgtgcgc aggcgggttg ctaagaccga tgtgaaatcc 660
ccgggctcaa cctgggaact gcattggtga ctggcaggct agagtatggc agaggggggt 720
agaattccac gtgtagcagt gaaatgcgta gagatgtgga ggaataccga tggcgaaggc 780
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accgcccgtc acaccatggg agtgggtttt accagaagtg gctagtctaa ccgcaaggag 1500
gacggtcacc acggtaggat tcatgactgg ggtgaagtcg taacaaggta gccgtagaag 1560
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<210> 44

<211> 1544

<212> DNA

<213> Neisseria gonorrhoeae

<400> 44

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acatatcgga acgtaccggg tagcggggga taactgatcg aaagatcagc taataccgca 180
tacgtcttga gagggaaagc aggggacctt cgggccttgc gctatccgag cggccgatat 240
ctgattagct ggttgggcgg gtaaaggccc accaaggcga cgatcagtag cgggtctgag 300
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gggaattttg gacaatgggc gcaagcctga tccagccatg ccgctgtctt gaagaaggcc 420
ttcgggttgt aaaggacttt tgtaggggaa gaaaaggctg ttgccaatat cggcgccgga 480
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gggtgagcgt gttaatcgga attactgggc gtaaagcggg cgcagacggt tacttaagca 600
ggatgtgaaa tccccgggct caaccgggga actgcgttct gaactgggtg actcgagtgt 660
gtcagaggga ggtggaattc cacgtgtagc agtgaaatgc gtagagatgt ggaggaatac 720
cgatggcgaa ggcagcctcc tgggataaca ctgacgttca tgtccgaaag cgtgggtagc 780
aaacaggatt agataccctg gtagtccacg ccctaaacga tgtcaattag ctgttgggca 840
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aggagtgcct tcgggagccg taacacaggt gctgcatggc tgcgtcagc tcgtgtcgtg 1080
agatgttggg ttaagtcccc caacgagcgc aaccttgtc attagttgcc atcattcgg 1140
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agggtaaccg caaggagtcg gcttaccacg gtatgcttca tgactggggg gaagtcgtaa 1500
caaggtagcc gtaggggaac ctgcggctgg atcacctcct ttct 1544

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<210> 45

<211> 1544

<212> DNA

<213> *Neisseria meningitidis*

<400> 45

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acatatcgga acgtaccgag tagtggggga taactgatcg aaagatcagc taataccgca 180
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gggaattttg gacaatgggc gcaagcctga tccagccatg ccgctgtct gaagaaggcc 420
ttcgggttgt aaaggacttt tgtcaggga gaaaaggctg ttgctaatat cagcggctga 480
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gggtgcgagc gttaatcgga attactgggc gtaaagcggg cgcagacggg tacttaagca 600
ggatgtgaaa tcccgggct caaccggga actgcgttct gaactgggtg actcgagtgt 660
gtcagaggga ggtagaattc cacgtgtagc agtgaatgc gtagagatgt ggaggaatac 720
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aggataacca caaggagtcg gcttaccacg gtatgcttca tgactggggg gaagtcgtaa 1500
caaggtagcc gtaggggaac ctgcggctgg atcacctcct ttct 1544

```

<210> 46

<211> 1537
<212> DNA
<213> *Pseudomonas aeruginosa*

<400> 46
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gcaagtcgag cttatgaagg gagcttgcc tggattcagc ggcggacggg tgagtaatgc 120
ctaggaatct gcctggtagt ggggggataac gtccggaaac ggccgctaata accgcatacg 180
tcctgaggga gaaagtcggg gatcttcgga cctcacgcta tcagatgagc ctaggtcggg 240
ttagctagtt ggtggggtaa aggcctacca aggcgacgat ccgtaactgg tctgagagga 300
tgatcagtca cactggaaact gagacacggg ccagactcct acgggaggga gcagtgggga 360
atattggaca atgggcgcaa gcctgatcca gccatgccgc gtgtgtgaag aaggtcttcg 420
gattgtaaag cactttaagt tgggaggaag ggcagtaagt taataccttg ctgtttgacg 480
ttaccaacag aataagcacc ggctaacttc gtgccagcag ccgcggtaat acgaaggggtg 540
caagcgtaa tcggaattac tgggcgtaaa gcgcgcgtaa gtggttcagc aagcttgatg 600
tgaaatcccc gggctcaacc tgggaactgc atccaaaagc tactgagcta gagtacggta 660
gaggtgtag aatttcctgt gtacggtga aatgcgtaga tataggaagg aacaccagtg 720
gcgaaggcga ccacctggac tgtactgaca ctgaggtgcg aaagcgtggg gagcaaacag 780
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tagccgtagg ggaacctgcg gctggatcac ctccctta 1537

<210> 47
<211> 1467
<212> DNA
<213> *Vibrio cholerae*

<220>
<221> modified_base
<222> (928)..(1464)
<223> N = A, C, G or T/U

<400> 47
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cgagcggcag cacagaggaa cttgttcctt ggggtggcag cgccggacgg gtgagtaatg 120
cctgggaaat tgcccggtag agggggataa ccattggaaa cgatggctaa taccgcataa 180
cctcgcaaga gcaaagcagg ggaccttcgg gccttgcgct accggatatg cccagggtgg 240


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attagctagt tggtagagga agggctcacc aaggcgacga tccctagctg gtctgagagg 300
atgatcagcc acactggaac tgagacacgg tccagactcc tacgggaggg agcagtgggg 360
aatattgcac aatgggcgca agcctgatgc agccatgccg cgtgtatgaa gaaggccttc 420
gggttgtaaa gtacttttcag tagggaggaa ggtggttaag ttaatacctt aatcatttga 480
cgttacctac agaagaagca cgggctaact ccgtgccagc agccgcggta atacggaggg 540
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gtttaacctt cgggaggacg cttnccc 1467

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<210> 48

<211> 1485

<212> DNA

<213> *Yersinia enterocolitica*

<220>

<221> modified_base

<222> (1)..(1484)

<223> N = A, C, G or T/U

<400> 48

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aacgtcttcg gaccaaagtg ggggacctta gggcctcacg ccatcngatg tgcccagatg 240
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ggaatattgc acaatgggcg caagcctgat gcagccatgc cgcgtgtgtg aagaaggcct 420
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gatgtgaaat cccgcgcgtt aacgtgggna cngcatttga aactggcaag cttagagtctt 660
gtagaggggg gtagaattcc aggtgtagcg gtgaaatgcg tagagatctg naggaatacc 720
ggtggcgaag gcggccccct ggacaaagac tgacgctcag gtgcgaaagc gtggggagca 780
aacaggatta gataccctgg tagtcacgc tgtaaacgat gtcgacttgg aggttgtgcc 840

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<210> 49

<211> 2927

<212> DNA

<213> *Bacillus subtilis*

<400> 49

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gggaaaccca ccactcgtaa tggagtggta tccatatctg aattcatagg atatgagaag 180
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<212> DNA

<213> *Enterococcus faecalis*

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<212> DNA

<213> Lactococcus lactis

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<213> Streptococcus mutans

<400> 55

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<210> 56

<211> 2902

<212> DNA

<213> *Streptococcus pneumoniae*

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<211> 2901

<212> DNA

<213> Streptococcus pyogenes

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<211> 3107

<212> DNA

<213> *Mycobacterium avium*

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<212> DNA

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<211> 2903

<212> DNA

<213> Escherichia coli

<400> 60

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<211> 2903

<212> DNA

<213> *Klebsiella pneumoniae*

<400> 61

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2022-2023

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 WHITLEY, J. PENN
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<213> Bacillus anthracis

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    <213> Klebsiella pneumoniae

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    <223> N = A, C, G or T/U

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<212> DNA
<213> ACTINOBACCILUS ACTIN

20
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<223> N = A, C, G or T/U

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35
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55
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<211> 1487
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<213> Haemophilus influenzae

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<210> 38

<211> 1532

<212> DNA

<213> *Bordetella bronchiseptica*

<400> 38

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<400> 43

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<211> 2902

<212> DNA

20 <213> Streptococcus pneumoniae

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20 <213> Streptococcus pyogenes

<400> 57

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<211> 3107

<212> DNA

20 <213> Mycobacterium avium

<400> 58

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